

REMARKS

This application has been reviewed in light of the Office Action dated June 22, 2006. Claims 1-5 and 7-16 are presented for examination. Claim 6 has been canceled, and its subject matter incorporated into claim 1. Claims 1 and 9, the independent claims, have been amended to define still more clearly what Applicants regard as their invention. Favorable reconsideration is requested.

Applicant affirms the election of claims 1-16 made by the undersigned on June 15, 2006 in response to a telephonic restriction requirement made by the Examiner. Applicant reserves his right to pursue one or more continuation or divisional applications to the non-elected claims.

Claims 1, 2, 5, 7, and 8 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,360,405 to Yoon ("the '405 patent). Claims 1 and 3 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,066,288 to Deniega et al. ("the '288 patent). Claims 4, 6, 9, 10, and 12-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '405 patent and U.S. Patent No. 5,591,190 to Yoon ("the '190 patent). Claims 4 and 9-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '288 patent and the '190 patent.

As shown above, Applicant has amended independent claims 1 and 9 in terms that more clearly define what the regards as his invention. Applicant submits that these amended independent claims, together with the remaining claims dependent thereon, are patentably distinct from the cited prior art for at least the following reasons.

Claim 1 is directed to an awl apparatus for penetrating bone. The awl apparatus includes a shaft having a proximal end and a distal end, with a cutting edge formed on the distal end. The awl further includes an outer sleeve having a wall, a proximal end, and a distal end, where the outer sleeve surrounds at least a portion of the shaft, and is movable with respect to the shaft, and a biasing member configured to bias the shaft to an initial position within the outer sleeve. The shaft is movable in the axial direction with respect to the outer sleeve by a predetermined distance to limit the depth of penetration of the cutting tip

into a bone, and can be rotated within the outer sleeve to aid in penetrating a bone. The distal end of the outer sleeve is conically tapered for releasable attachment to a bone plate. Further, there is at least one aperture in the wall of the outer sleeve.

Claim 9 is directed to an awl apparatus for penetrating bone. The awl apparatus includes a shaft having a proximal end and a distal end, with a cutting edge formed on the distal end. The awl further includes an outer sleeve having a wall, a proximal end, and a distal end, where the outer sleeve surrounds at least a portion of the shaft, and is movable with respect to the shaft, and a biasing member configured to bias the shaft to an initial position within the outer sleeve. The shaft is movable in the axial direction with respect to the outer sleeve by a predetermined distance to limit the depth of penetration of the cutting tip into a bone, and can be rotated within the outer sleeve to aid in penetrating a bone. Further, there is at least one aperture in the wall of the outer sleeve.

Both claims 1 and 9 have been amended to recite that there is at least one aperture in the wall of the outer sleeve. Support for this feature may be found at least at page 3, line 31, to page 4, line 3, which recites that diametrically opposed slots 118 through the wall 119 of the top outer sleeve 110 are approximately 2 mm wide and approximately 30 m long, and facilitate cleaning and sterilizing awl assembly 100 between surgeries. Other dimensions and shapes of openings may be used instead of the slots 118 described. One or more slots 118 may be provided and the slots 118 can have the same or different dimensions.

The '405 patent relates to automatic retractable safety penetrating instruments having sleeves for introduction into anatomical cavities and penetrating members with sharp tips disposed with the sleeves for penetrating cavity walls. The '405 patent, however, fails to teach or suggest the feature of at least one aperture in the wall of the outer sleeve.

The '288 patent relates to trocars used to puncture tissue for the performance of laparoscopic or arthroscopic surgery. Applicants submit that the '288 patent also fails to teach or suggest the feature of at least one aperture in the wall of the outer sleeve.

The '190 patent relates to penetrating instruments formed of trocars having solid, tissue penetrating, sharp tips and safety shields surrounding the trocars for preventing tissue

from contacting the sharp tips after entry into body cavities. Figures 15 and 16 discloses threads on the trocar and safety shield. The Examiner suggests that the space between these external threads of the safety shield in the '190 patent comprises a slot. The '190 patent, however, fails to teach or suggest the feature of at least one aperture in the wall of the outer sleeve.


Applicant submits that a combination of either the '405 and '190 patents, and the '288 and '190 patents, assuming such combinations would even be permissible, fail to teach or suggest the feature of at least one aperture in the wall of the outer sleeve. Accordingly, Applicant submits that claims 1 and 9 are patentable over the cited art.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application. Should the Examiner have any questions or comments concerning this submission, he is invited to call the undersigned at the phone number identified below.

Respectfully submitted,

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